

P a t e n t c l a i m s

1.

A method for joining flanges or other coupling elements to pipes, characterised in that a
5 plurality of circular beads (5; 6) in the pipe wall are pressed into corresponding grooves
(3; 4) in the surrounding coupling element, where the buckled-in areas (b) that naturally
occur in the pipe wall between the beads during the first part of the pressing operation
are, towards the end of the pressing operation, after-pressed outwards, so that an
outward tension is obtained in the pipe.

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2.

A tool for joining flanges or other coupling elements to pipes, characterised in that the
tool has a plurality of axially separated, radially moving segments (10) having a
plurality of circular ridges (11) for pressing circular beads (5; 6) in the pipe wall into
15 corresponding grooves (3; 4) in the coupling element, where between the ridges on the
segments there are cylindrical portions (13) which, towards the end of the pressing
operation, after-press the buckled-in areas that occur naturally in the pipe wall between
the beads during the first part of the pressing operation outwards, so that an outward
tension is obtained in the pipe.

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3.

A tool for joining coupling elements to pipes according to claim 2, characterised in that
on the cylindrical part of the segments which lies above the end of the pipe there is
arranged a projection (14) which presses the pipe end out slightly further than the
25 diameter proper of the pipe.

4.

A tool for joining coupling elements to pipes according to claim 2 or 3, characterised in
that the segments have an internal conical shape whereby a cone in the centre of the
30 segments is drawn out and thus expands the segments radially.

5.

A coupling element for the method according to claim 1, characterised in that in the
foremost portion of the element which surrounds the pipe where the pipe has its end,
35 there is a recess (a) that is greater than the outer diameter of the pipe so that there will
be room for the pipe end to be given an overbending outwards.

6.

A coupling element according to claim 5, characterised in that the element (30) is spherically shaped externally to allow two corresponding halfed flanges to be clamped
5 around the element, whereby an angular adjustment on connection to an adjacent flange is obtained.